



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,040	02/01/2001	Mathias Bischoff	GR 00 P 1078 US	8362

7590 01/13/2005

LERNER AND GREENBERG, P.A.  
POST OFFICE BOX 2480  
HOLLYWOOD, FL 33022-2480

EXAMINER
----------

PHAN, HANH

ART UNIT	PAPER NUMBER
----------	--------------

2633

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b> <sup>CA</sup>	
	09/775,040	BISCHOFF, MATHIAS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hanh Phan	2633	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 February 2001.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 20-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 08/16/2004.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 10 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-Claim 10 recites "a second switching matrix" is unclear because in claim 1 does not recite "a first switching matrix".

4. Claims 20-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. In *Ex part Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990). See MPEP 2173.05 (P) Section II.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 7-9, 11, 12, 16 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ushirozawa (US Patent No. 6,137,613) in view of Okazaki et al (US Patent No. 6,285,479).

Regarding claims 1, 16 and 20-24, referring to figures 3-6, Ushirozawa discloses an access node for optical networks with variable access wavelengths, comprising:

a plurality of first optical conductors (Fig. 3) each disposed to connect a respective user device (i.e., data signal 1-H to N-H, Fig. 3);

at least one second optical conductor (Fig. 3) for connecting the access node to an optical network; and

a plurality of light sources (i.e., light sources 2-1 to 2-N, Fig. 3) emitting unmodulated light signals at wavelengths of the optical network and connected to the first optical conductors for feeding the unmodulated light signals to the user devices (col. 4, lines 53-67 and col. 5, lines 1-17).

Ushirozawa differs from claims 1, 16 and 20-23 in that he does not specifically teach the unmodulated light signals of the light sources can be modulated in the user devices. However, Okazaki in US Patent No. 6,285,479 teaches the unmodulated light signals of the light sources can be modulated in the user devices (Fig. 11, col. 21, lines

Art Unit: 2633

44-67 and col. 22, lines 1-11). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the unmodulated light signals of the light sources can be modulated in the user devices as taught by Okazaki in the system of Ushirozawa. One of ordinary skill in the art would have been motivated to do this since Okazaki suggests in column 21, lines 44-67 that using such the unmodulated light signals of the light sources can be modulated in the user devices have advantage of allowing the user terminal can be accessed to the optical network.

Regarding claim 2, the combination of Ushirozawa and Okazaki teaches at least one second optical conductor is one of a plurality of optical conductors connecting the access node to the optical network (Fig. 3 of Ushirozawa and Fig. 11 of Okazaki).

Regarding claims 3 and 4, the combination of Ushirozawa and Okazaki teaches teaches the light sources are lasers (Fig. 11 of Okazaki).

Regarding claims 7 and 8, the combination of Ushirozawa and Okazaki teaches a first switching matrix connected between the light sources and the first optical conductors (Fig. 3 of Ushirizawa).

Regarding claims 9 and 11, the combination of Ushirozawa and Okazaki teaches a signal processing block with optical wavelength division multiplexers connected between the first optical conductors and the second optical conductors (Fig. 3 of Ushirozawa and Fig. 11 of Okazaki).

Regarding claim 12, the combination of Ushirizawa and Okazaki teaches

Art Unit: 2633

the at least one additional signal processing unit is selected from the group consisting of a switching matrix, an optical switch, an optical amplifier, and an optical monitoring device ( Figs. 3-6 of Ushirizawa).

7. Claims 5, 6, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ushirozawa (US Patent No. 6,137,613) in view of Okazaki et al (US Patent No. 6,285,479) and further in view of Pan et al (US Patent 6,275,511).

Regarding claim 5, Ushirizawa as modified by Okazaki teaches all the aspects of the claimed invention as set forth in the rejection to claim 1 above except fails to teach optical coupling elements disposed between the light sources and the first optical conductors. However, Pan teaches optical coupling elements disposed between the light sources and the first optical conductors (Figs. 7A and 7B, col. 6, lines 40-67 and col. 7, lines 1-24). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the optical coupling elements disposed between the light sources and the first optical conductors as taught by Pan in the system of Ushirozawa modified by Okazaki. One of ordinary skill in the art would have been motivated to do this Pan suggests in column 6, lines 40-67 and col. 7, lines 1-24 that using such the optical coupling elements disposed between the light sources and the first optical conductors have advantage of allowing providing the optical information signals from the users into an optical network.

Art Unit: 2633

Regarding claim 6, the combination of Ushirozawa, Okazaki and Pan teaches the optical coupling elements are selected from the group consisting of first circulators and directional couplers (Figs. 7A and 7B of Pan).

Regarding claims 14 and 15, the combination of Ushirozawa, Okazaki and Pan teaches a user device comprising an optical circulator and a modulator to be connected to an information source (Figs. 7A and 7B of Pan).

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-16 and 20-23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2633

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

  
HANH PHAN  
PRIMARY EXAMINER